ELSEVIER

Nuclear Engineering and Design 172 (1997) 393–395

Nuclear Engineering and Design

CONTENTS OF ISSUE 172 (1–2)

Three-dimensional damage theory of crack growth in large centre-cracked panels using the element removal technique
Z.H. Li, I.C. Howard and B. A. Bilby 1

Spent fuel storage in pressure vessel for a nuclear heating reactor
C. Huajian, D. Duo and X. Yong 13

Seismic response of tuned single degree of freedom secondary systems
A. Gupta and A.K. Gupta 17

Structural integrity assessment of aging nuclear reactor pressure vessels
W.E. Pennell and S.N.M. Malik 27

Investigation of dynamic strain aging in SA106 Gr.C piping steel
J.W. Kim and I.S. Kim 49

Surface-crack aspect ratio development during corrosion-fatigue crack growth in low-alloy steels
L.A. James 61

Chemical interaction between VVER core components under accidental condition
L. Maróti 73

Review of Halden reactor project high burnup fuel data that can be used in safety analyses
W. Wiesenack 83

Integrity assessment of the high temperature engineering test reactor (HTTR) control rod at very high temperatures
Y. Tachibana, S. Shiozawa, J. Fukakura, F. Matsumoto and T. Araki 93

Large eddy simulation of turbulent crossflow in tube bundles
H.R. Barsamian and Y.A. Hassan 103

Fluid-structure interaction in non-rigid pipeline systems
A.G.T.J. Heinsbroek 123

Critical heat flux and flow pattern for water flow in annular geometry
J.-W. Park, W.-P. Baek and S.H. Chang 137

A methodology for collection and analysis of human error data based on a cognitive model: IDA
S.-H. Shen, C. Smidts and A. Mosleh 157

Modified k–ϵ model for two-phase turbulent jets
M.A. Lopez de Bertodano and A.A. Saif 187

Some aspects of risk reduction strategy by multiple recycling in fast burner reactors of the plutonium and minor actinide inventories
L.H. Baetsle and C.D. Raedt 197

Effects of ventilation and backfill on a mined waste disposal facility
R.D. Manteufel 205

PII S0029-5493(97)00230-6

Quantification of the uncertainty in the effect of irradiation on Charpy properties
P.L. Windle and R. Moskovic 221
Effect of reinforcement ratio on the resistance of reinforced concrete to hard projectile impact
A.N. Dancygier 233
Seismic design of nuclear facilities in Germany
A. Birkhofer 247

Instructions to Contributors 261

CONTENTS OF ISSUE 172 (3)

Materials Engineering
Environmentally assisted cracking behavior of a low-alloy steel under non-isothermal conditions
L.A. James 265
Forced vibration test of the Hualien large scale soil structure interaction model (part 2)
Y. Sugawara, T. Uetake, T. Kobayashi and H. Yamaya 273
Correlation analysis for forced vibration test of the Haulien large scale seismic test program
Y. Sugawara, T. Sugiyama, T. Kobayashi, H. Yamaya and E. Kitamura 281
Seismic response analysis of embedded structure at Hualien, Taiwan
T. Ueshima, T. Kokusho, T. Okamoto and H. Yajima 289
Distribution of ground rigidity and ground model for seismic response analysis in Hualian project of large scale seismic test
T. Kokusho, K. Nishi, T. Okamoto, Y. Tanaka, T. Ueshima, K. Kudo, T. Kataoka, M. Ikemi, T. Kawai, Y. Sawada, K. Suzuki, K. Yajima and S. Higashi 297
Strain analysis on ductile cast iron containers at drop tests
A. Ettemeyer, D. Schreiber and W. Völzer 309

Reactor Engineering
The HTTR reactor pressure vessel and its integrity against a PTS event
R. Kurihara 317

Thermal-Hydraulics, Safety and Risk Analysis
Modular design and construction techniques for nuclear power plants
C.W. Lapp and M.W. Golay 327
A numerical prediction on the turbulent flow in closely spaced bare rod arrays by a nonlinear $k-\epsilon$ model
K.B. Lee and H.C. Jang 351

Fuel Engineering
Some aspects of risk reduction strategy by multiple recycling in fast burner reactors of the plutonium and minor actinide inventories
L.H. Baetslé and C. De Raedt 359

Technical notes
Demonstration of piping integrity with SMA technology
H. Kornfeldt, M. Malmberg, J. Stribeck, P. Scott, T. Kilinski, D. Rudland, R. Olson and T. Djerfh 367
Validation of simplified fracture mechanics methods by testing of real components
G. Bartholomé, G. Senski, R. Wellein and C. Schmidt 373

Conference report

The 7th Annual Conference of the Nuclear Society on New Energy Technologies and the Role of Nuclear Fission and Fusion Energy
P.A. Gagarinski 381

Forum

Conclusions of the ENS Class 1 Topical meeting on '**Research Facilities for the Future of Nuclear Energy**': Brussels, 4–6 June 1996
K. Foskolos, H.A. Abderrahim, J.-M. Baugnet and on behalf of the Programme Committee 385

List of Referees for 1995 387
Contents of Volume 172 393
Author Index of Volume 172 397
Subject Index of Volume 172 399
Instructions to Contributors 401